Regional Configuration of Intersite Coordination (ISC) Filter

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Purpose:

To establish policy for a standard configuration of ISC filters for the WFO's Graphic Forecast Editor (GFE).

Policy:

IFPS grid traffic has been identified as a major contributor to WAN and local AWIPS performance slow downs. To address this issue, FSL has modified IFPS 17.6 to filter the amount of ISC grids sent to neighboring sites. The GFE can now filter by element, explicit start and end times, or select multiple grid intervals. For example, you can choose to only send 3 hourly temperature grids out to 24 hours, then 6 hourly temperature grids out to 72 hours, and then no temperature grids past 72 hours. This new capability can dramatically reduce the ISC grid traffic impact on the sending and receiving AWIPS. This configuration and filter does not impact the content or configuration of the WFOs local grid database.

Western Region WFOs will be required to configure their GFE to send ISC grids for **T, Td, RH, Sky, Wind Dir/Speed, and Wind Gust** that match up with the required NDFD grid times (i.e. wind direction and speed grid at 3 hour increments through 72 hours, then 6 hour increments out to168 hours from 00 UTC Day 1.).

Special Cases:

For offices that have shared or overlapping forecast areas (i.e. fire weather zones extending into a neighbors county warning area), there may be additional ISC grid requirements. In those special cases, the WFO needs to work with their neighbor to identify which additional ISC grids they need. Exemption to the standard configuration policy has to then be approved by MSD on a case by case basis.

Offices that have non-Western Region WFO neighbors may have special grid requirements beyond the NDFD configuration. In those cases, notify MSD, who in turn will work with the adjoining region's MSD to mitigate any impacts the policy may have on non-Western Region WFO requirements.

Tools/Actions needed to carry out this policy:

A standard configuration to limit ISC grid transmissions for selected grids to satisfy NDFD requirements will be supplied by WRH as a baseline example.

Documentation for the configuration of ISC filters can be found in the FSL online help for IFPS 17.6 or later. In FSL's documentation, information on filtering can be found in sections devoted to ifpnetCDF program and Intersite and Intrasite Coordination of Grids.

http://www-md.fsl.noaa.gov/eft/AWIPS/17p/onlinehelp/ifpnetCDF.html#configIntervalFile

http://www-md.fsl.noaa.gov/eft/AWIPS/17p/onlinehelp/IntersiteCoordination.html#ControllingProcessing

Note: In addition to this online documentation, the technique uses iscExtract for purposes of ISC data exchange. For that to function properly, the iscSendSampleDef file needs to be adjusted.

> The BASE version of the sampling file does not contain any special filters, i.e., all data is transmitted, but may be overridden at the SITE level as necessary to trim down the data transferred via ISC. The sampling file is called iscSendSampleDef and is a Utility, thus it can be accessed through the GFE's Define Smart Tool GUI. It is physically located at:

.../data/databases/BASE/TEXT/Utility/iscSendSampleDef.Utility.

> Instructions on how to change configurations are at the link below…
>
> http://www-md.fsl.noaa.gov/eft/AWIPS/17n/onlinehelp/ifpnetCDF.html#configIntervalFile
>
> Example of a temp configuration:

```
SampleDef ['T_SFC'] = (
[0*HR],
[
(0*HR, 3*HR),
(72*HR, 6*HR),
])
```

This example configuration will send T grids every 3 hours for the first 72 hours and every 6 hours after that. Instructions on what the coding means is in the release notes for IFPS 17.6.